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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/642,599

08/19/2003

Michael Francis Dolan

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EXAMINER

NGUYEN, HUY D

ART UNIT

PAPER NUMBER

2617

DATE MAILED: 10/19/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/642,599	<b>Applicant(s)</b> DOLAN ET AL.	
	<b>Examiner</b> Huy D. Nguyen	<b>Art Unit</b> 2617	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 28 July 2006.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-3,5,7-10,12,13 and 15-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3,5,7-10,12,13 and 15-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                       | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

## **DETAILED ACTION**

### ***Response to Arguments***

- I.** Applicant's arguments with respect to claims 1-19 have been considered but are moot in view of the new ground(s) of rejection.

### ***Claim Rejections - 35 USC § 103***

- 2.** The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

- 3.** Claims 1-3, 7-10 and 15-19 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent App. Pub. No. 2002/0045443 to Hunzinger, in view of U.S. Patent App. Pub. No. 2004/0085894 to Wang et al. and in further view of Rinchiuso (US 2003/0012222 A1).
- 4.** Referring to claim 1, Hunzinger discloses a method comprising: activating a call recovery timer to detect an error condition (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer; dropped connection is interpreted as being the error condition); and establishing a new communication channel if a current communication channel is judged to potentially drop (page 5, paragraph 50, potential connection drop; add channels to rescue connection in danger of dropping), wherein activating the call recovery timer includes monitoring the current communication channel while establishing the new communication channel (page 8, paragraph 84, monitor; continuously monitor existing or new candidates and

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promote them to the active set; also, page 5, paragraph 50, add channels to rescue connection). Hunzinger does not disclose resetting the call recovery timer if good frames are received on the current communication channel. The examiner maintains that the concept of resetting the call recovery timer if good frames are received on the current communication channel was well known in the art as taught by Wang et al. In a similar field of endeavor, Wang et al show resetting a timer when a good frame is received (page 8, paragraph 81). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hunzinger to show a method comprising: activating a call recovery timer to detect an error condition; and establishing a new communication channel if a current communication channel is judged to potentially drop, wherein activating the call recovery timer includes monitoring the current communication channel while establishing the new communication channel, and resetting the call recovery timer if good frames are received on the current communication channel, as taught by Wang et al, the motivation being receiving a response within the allotted time (Wang et al, page 8, paragraph 84). The combination of Hunzinger and Wang et al. does not specifically teach dropping the current communication if the call recovery timer expires. However, the preceding limitation is taught in Rinchiuso (see paragraph 0008). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Rinchiuso to the teaching of Hunzinger and Wang et al. to automatically account for the varying data transfer rate and for optimizing data transfer between networked components.

Referring to claim 2, Hunzinger discloses the method according to claim 1, wherein establishing a new communication channel includes detecting the presence of at least a plurality of bad frames on the current communication channel (page 6, paragraph 64, bad frames).

Referring to claim 3, Hunzinger discloses the method according to claim 2, wherein the cell recovery timer is activated once at least 12 bad frames are detected on the current communication channel (page 3, paragraph 26, 12 consecutive bad frames).

Referring to claim 7, Hunzinger discloses the method according to claim 1, wherein establishing the new communication channel includes searching for a pilot channel on an active carrier (page 2, paragraph 23, searches for a pilot).

Referring to claim 8, Hunzinger discloses the method according to claim 7, wherein establishing the new communication channel further includes decoding a sync channel and at least one of a broadcast common channel and a paging channel (page 2, paragraph 15, decode/sync channel; page 1, paragraph 7, paging channels/broadcast).

Referring to claim 9, Hunzinger discloses the method according to claim 8, further including using the new communication channel to continue a session on the current communication channel (page 9, paragraph 92, new channel).

Referring to claim 10, Hunzinger discloses a method, comprising: activating a cell recovery timer to detect the error condition (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer); monitoring the error condition on an active communication channel (page 3, paragraph 27, high frame error rates or bursty error rates; also, pages 4 and 5, paragraph 50, potential connection drop is interpreted as being an error condition); establishing a simultaneous communication channel (page 9, paragraph 92, new channel) while the call recovery timer is active (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer); and searching the simultaneous communications channel (page 4, paragraph 47, searching for the ACC in those pilots) while continuing to monitor the active communication

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channel (page 8, paragraph 84, monitor). Hunzinger does not disclose resetting the call recovery timer if good frames are received on the current communication channel. The examiner maintains that the concept of resetting the call recovery timer if good frames are received on the current communication channel was well known in the art as taught by Wang et al. In a similar field of endeavor, Wang et al show resetting a timer when a good frame is received (page 8, paragraph 81). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hunzinger to show a method, comprising: activating a cell recovery timer to detect the error condition; monitoring the error condition on an active communication channel; establishing a simultaneous communication channel while the call recovery timer is active; searching the simultaneous communications channel while continuing to monitor the active communication channel; and resetting the call recovery timer if good frames are received on the current communication channel, as taught by Wang et al, the motivation being receiving a response within the allotted time (Wang et al, page 8, paragraph 84). The combination of Hunzinger and Wang et al. does not specifically teach dropping the current communication if the call recovery timer expires. However, the preceding limitation is taught in Rinchiuso (see paragraph 0008). It would have been obvious to one having ordinary skill in the art at the time the invention was made to apply the teaching of Rinchiuso to the teaching of Hunzinger and Wang et al. to automatically account for the varying data transfer rate and for optimizing data transfer between networked components.

Referring to claim 15, Hunzinger discloses the method according to claim 10, wherein the call recovery timer is transmitted from a wireless system base station (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer; page 5, paragraph 57, BS).

Referring to claim 16, Hunzinger discloses a method, comprising: supplying specific session information to a new channel to assist a call recovery process (page 5, paragraph 54, rescue attempt), the call recovery process initiated by a call recovery timer (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer) in response to an error condition on an active channel (page 3, paragraph 27, high frame error rates or bursty error rates; also, pages 4 and 5, paragraph 50, potential connection drop is interpreted as being an error condition); and monitoring the active channel while establishing the new channel (page 8, paragraph 84, monitor). Hunzinger does not disclose resetting the call recovery timer if good frames are received on the current communication channel. The examiner maintains that the concept of resetting the call recovery timer if good frames are received on the current communication channel was well known in the art as taught by Wang et al. In a similar field of endeavor, Wang et al show resetting a timer when a good frame is received (page 8, paragraph 81). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hunzinger to show a method, comprising: supplying specific session information to a new channel to assist a call recovery process, the call recovery process initiated by a call recovery timer in response to an error condition on an active channel; monitoring the active channel while establishing the new channel; and resetting the call recovery timer if good frames are received on the current communication channel, as taught by Wang et al, the motivation being receiving a response within the allotted time (Wang et al, page 8, paragraph 84). The combination of Hunzinger and Wang et al. does not specifically teach dropping the current communication if the call recovery timer expires. However, the preceding limitation is taught in Rinchiuso (see paragraph 0008). It would have been obvious to one having ordinary skill in the art at the time

the invention was made to apply the teaching of Rinchioso to the teaching of Hunzinger and Wang et al. to automatically account for the varying data transfer rate and for optimizing data transfer between networked components.

Referring to claim 17, Hunzinger discloses the method according to claim 16, further comprising receiving an origination message requesting voice communication with a user currently using the active channel (page 4, paragraph 50, voice).

Referring to claim 18, Hunzinger discloses the method according to claim 17, further comprising authorizing voice communication with the user (page 4, paragraph 50, voice).

Referring to claim 19, Hunzinger discloses the method according to claim 18, further comprising dropping the active channel (page 5, paragraph 54, connection is dropped).

5. Claims 5 and 12-13 rejected under 35 U.S.C. 103(a) as being unpatentable over U.S. Patent App. Pub. No. 2002/0045443 to Hunzinger, in view of U.S. Patent App. Pub. No. 2004/0085894 to Wang et al and further in view of Rinchioso (US 2003/0012222 A1) and U.S. Patent App. Pub. No. 2002/0065080 to Pittampalli et al.

Referring to claim 5, Hunzinger, Wang et al., and Rinchioso disclose the method according to claim 1 with a call recovery timer (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer). Hunzinger, Wang et al., and Rinchioso do not disclose that the call recovery timer is less than 5 seconds. However, Pittampalli et al disclose waiting an additional DELTA milliseconds for the call to recover (page 4, paragraph 31, it is inherent that this wait time value is less than 5 seconds). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hunzinger, Wang et al., and



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Rinchuso to show that the call recovery timer is less than 5 seconds, as taught by Pittampalli et al, the motivation being waiting before using a larger or different set of base stations to serve the call (Pittampalli et al, page 4, paragraph 31).

Referring to claim 12, Hunzinger, Wang et al., and Rinchuso disclose the method according to claim 10, further comprising establishing an active communication session on the simultaneous communication channel (page 5, paragraph 50, add BS pilot channels to the active set in order to rescue) and a call recovery timer (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer). Hunzinger, Wang et al., and Rinchuso do not disclose establishing an active session if the call recovery timer elapses. However, Pittampalli et al disclose waiting an additional DELTA milliseconds for the call to recover (page 4, paragraph 31). Therefore, it would have been obvious to one of ordinary skill in the art at the time of the invention to modify Hunzinger, Wang et al., and Rinchuso to show establishing an active communication session on the simultaneous communication channel if the call recovery timer elapses, as taught by Pittampalli et al, the motivation being waiting before using a larger or different set of base stations to serve the call (Pittampalli et al, page 4, paragraph 31).

Referring to claim 13, Hunzinger, Wang et al., and Rinchuso disclose the method according to claim 10 with a call recovery timer (page 5, paragraph 54, FRP timer is interpreted as being the call recovery timer) and a fade timer expiring after 5 seconds (page 3, paragraph 26, fade timer). Hunzinger, Wang et al., and Rinchuso do not disclose that the call recovery timer is less than a fade timer. However, Pittampalli et al disclose waiting an additional DELTA milliseconds for the call to recover (page 4, paragraph 31, it is inherent that this wait time value is less than 5 seconds; DELTA milliseconds < 5 seconds). Therefore, it would have been obvious

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to one of ordinary skill in the art at the time of the invention to modify Hunzinger, Wang et al., and Rinchiuso to show that the call recovery timer is less than a fade timer, as taught by Pittampalli et al, the motivation being waiting before using a larger or different set of base stations to serve the call (Pittampalli et al, page 4, paragraph 31).

### ***Conclusion***

6. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Huy D. Nguyen whose telephone number is 571-272-7845. The examiner can normally be reached on M-F.


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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph H. Feild can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

JEAN GELIN  
PRIMARY EXAMINER



  
Huy D Nguyen  
Patent Examiner  
Art Unit 2617